

IN THE ABSTRACT:

Please DELETE the Abstract in its entirety and substitute the attached new Abstract.

A method synchronizes a radio communication system that is divided up into radio cells. According to the method, every radio cell has one base station each for the radio coverage of a plurality of mobile stations assigned to the radio cell. The base station receives, in addition to mobile station signals of its own radio cell, mobile station signals of neighboring radio cells. The base station determines, on the basis of the mobile station signals received, the number of mobile stations and compares this number with a defined threshold value. When the number determined falls below the threshold value, a first synchronization method for synchronizing the base station and the assigned mobile stations is used, the first method corresponding to an assigned transmission standard of the radio communication system. When the threshold value is exceeded, a second synchronization method is used for synchronizing the base station and the assigned mobile stations.